



# IBM 5285

## System Logic Manual

SY31-0632-1

5280

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### Second Edition (December 1980)

This is a major revision of, and makes obsolete, SY31-0632-0. Because the changes and additions are extensive, this publication should be reviewed in its entirety. Changes are periodically made to the information herein; these changes will be reported in technical newsletters or in new editions of this publication.

Use this publication as an aid in servicing the IBM 5285 or as an aid in understanding the operation of the IBM 5285.

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# Technical Newsletter

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## IBM 5285 System Logic Manual

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This technical newsletter provides replacement pages for the subject publication. Pages to be inserted and/or removed are:

LD18

### Summary of Amendments

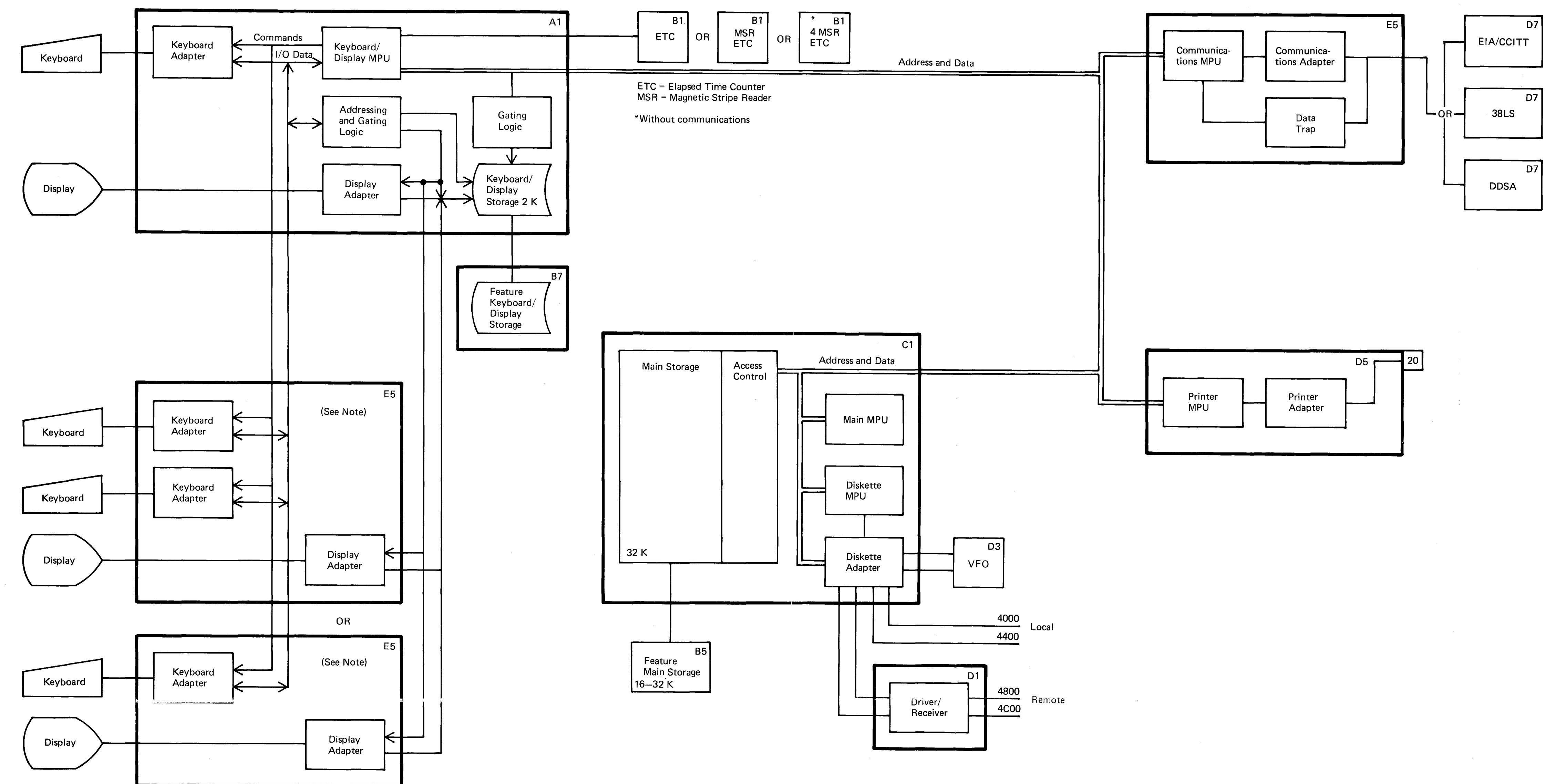
- Correction of pin numbering for printer cable connector

Note: *Please file this cover letter at the back of the manual to provide a record of changes.*

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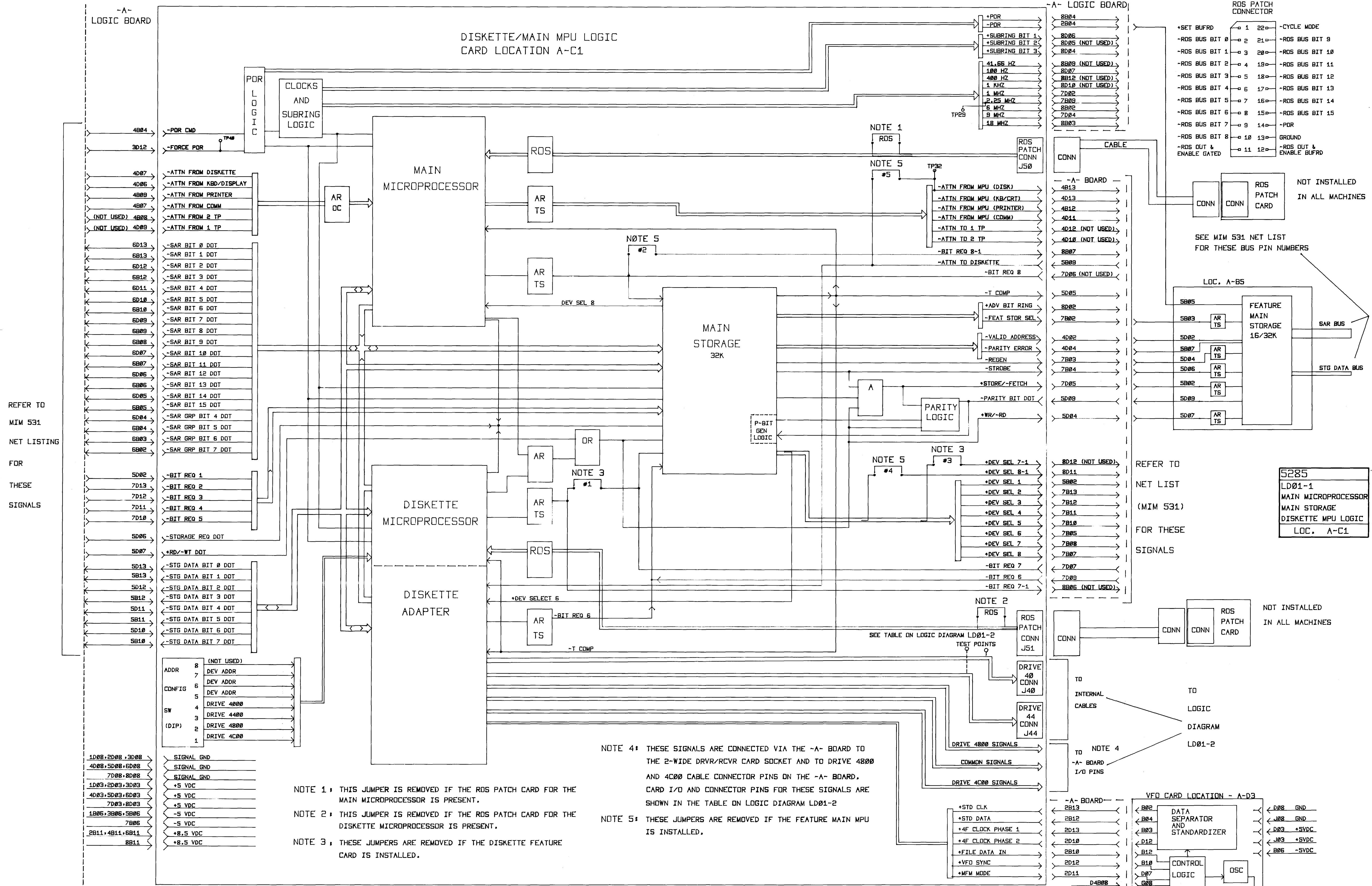
IBM Corporation, Information Design and Development, Department 997, 11400 Burnet Rd., Austin, Texas 78758

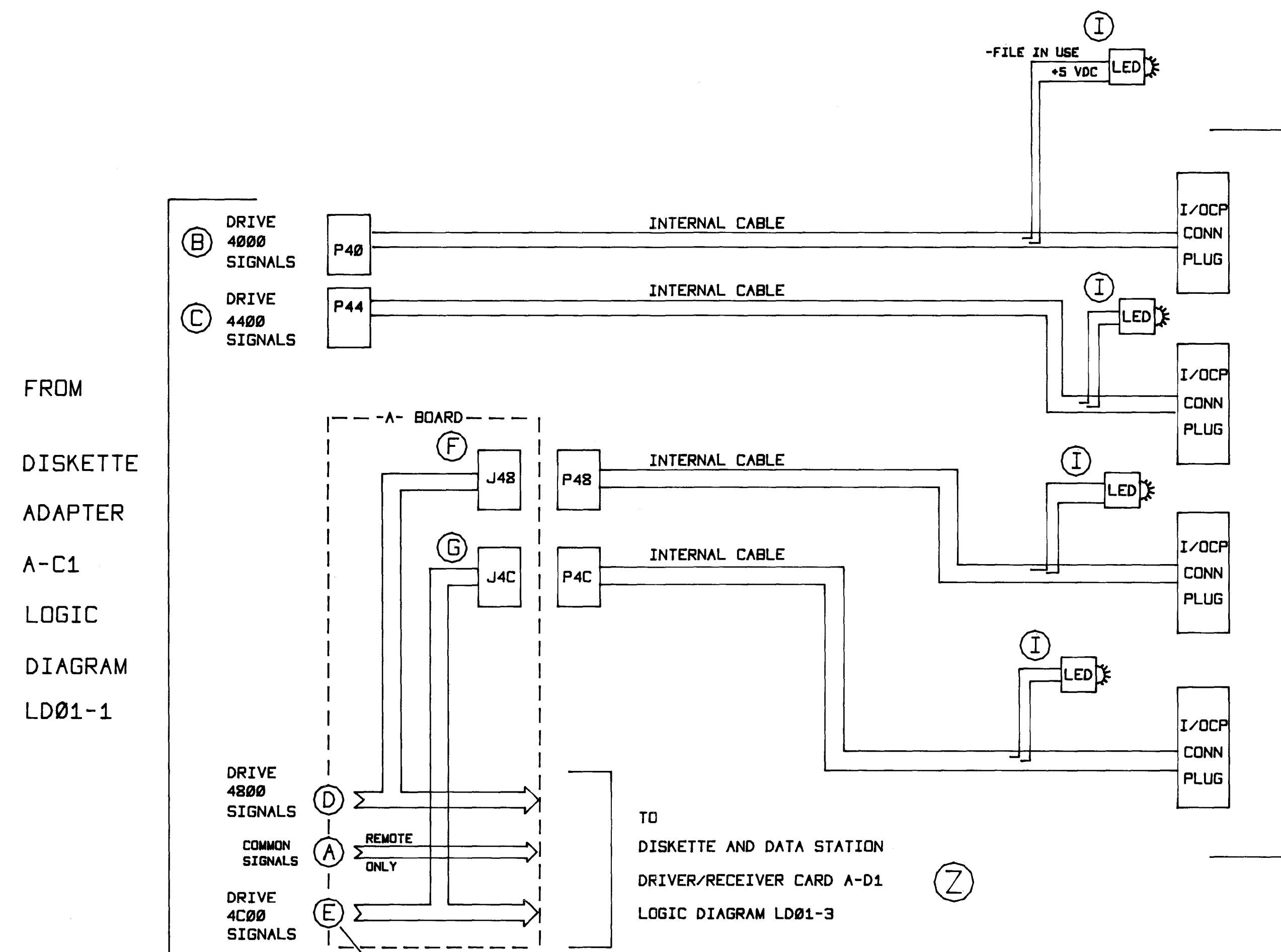
Printed in U.S.A.



**Note:** Either a single or a dual data station may be added if the communications feature is not installed.

LD00 IBM 5285 System Logic Overview

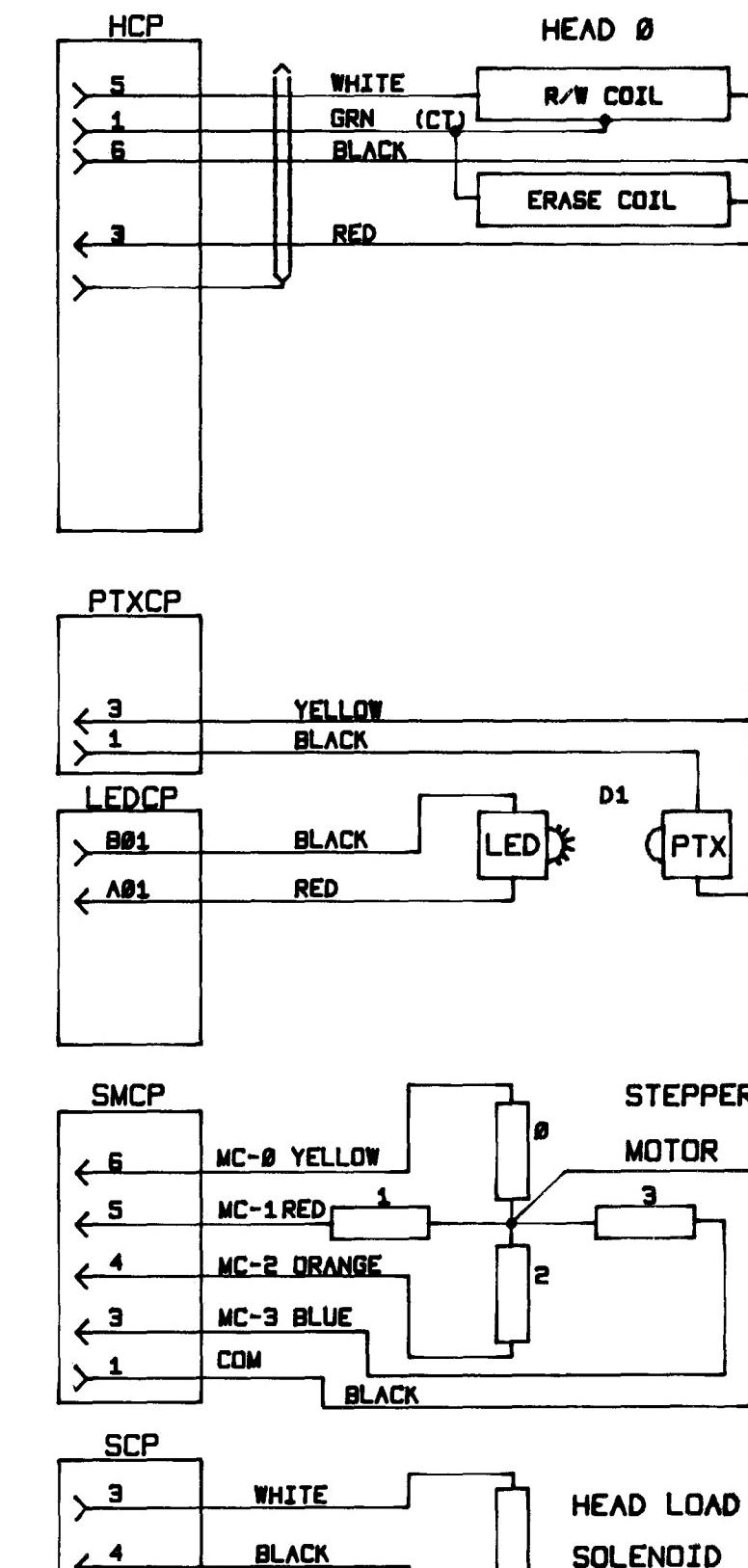
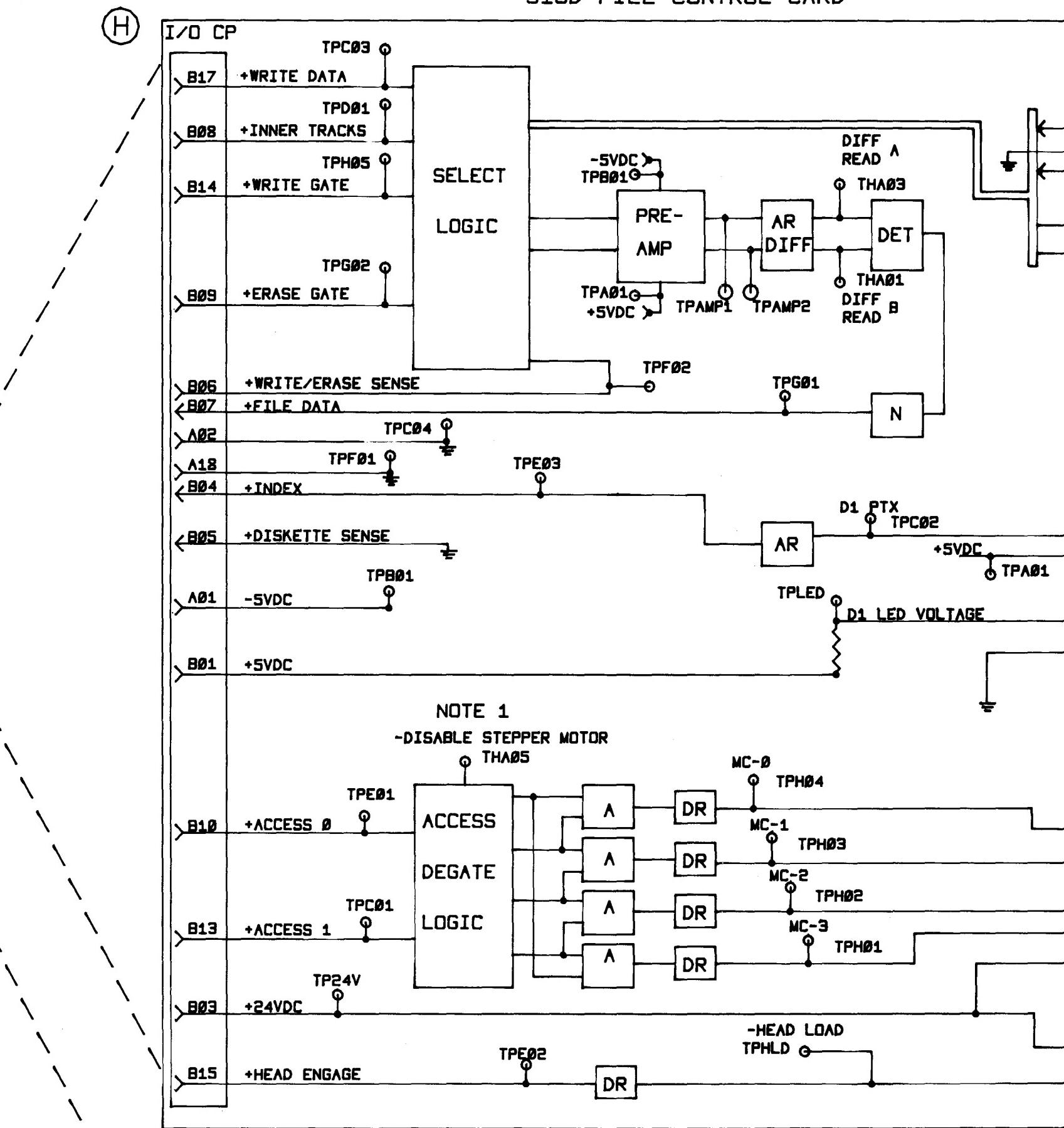




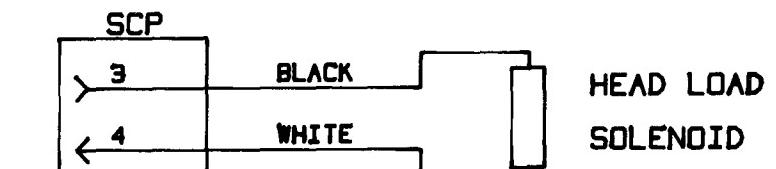
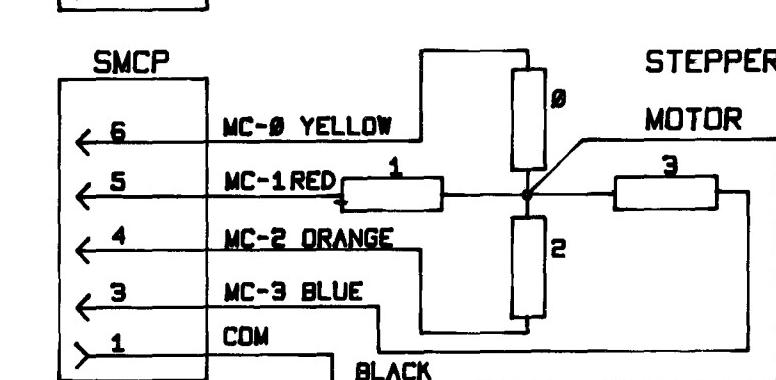
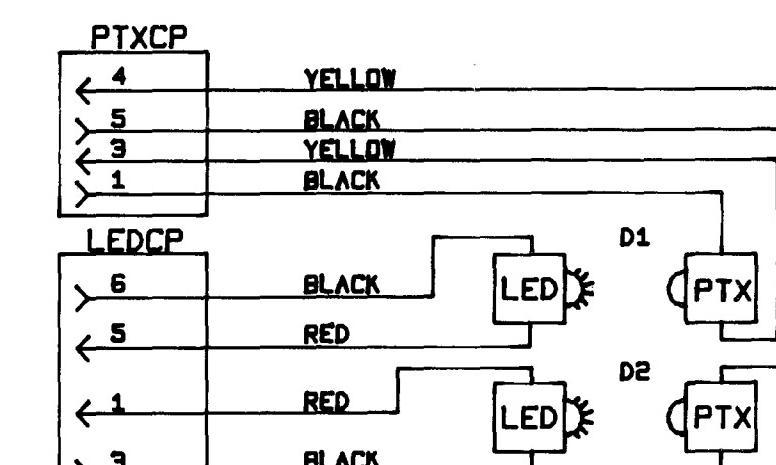
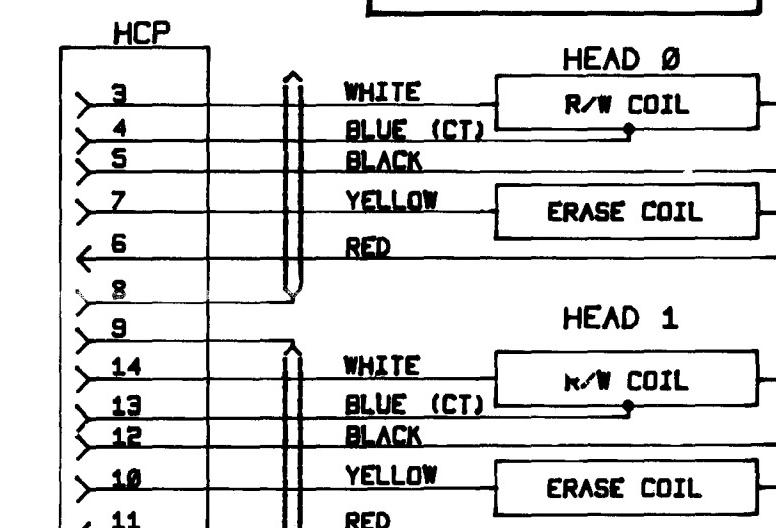
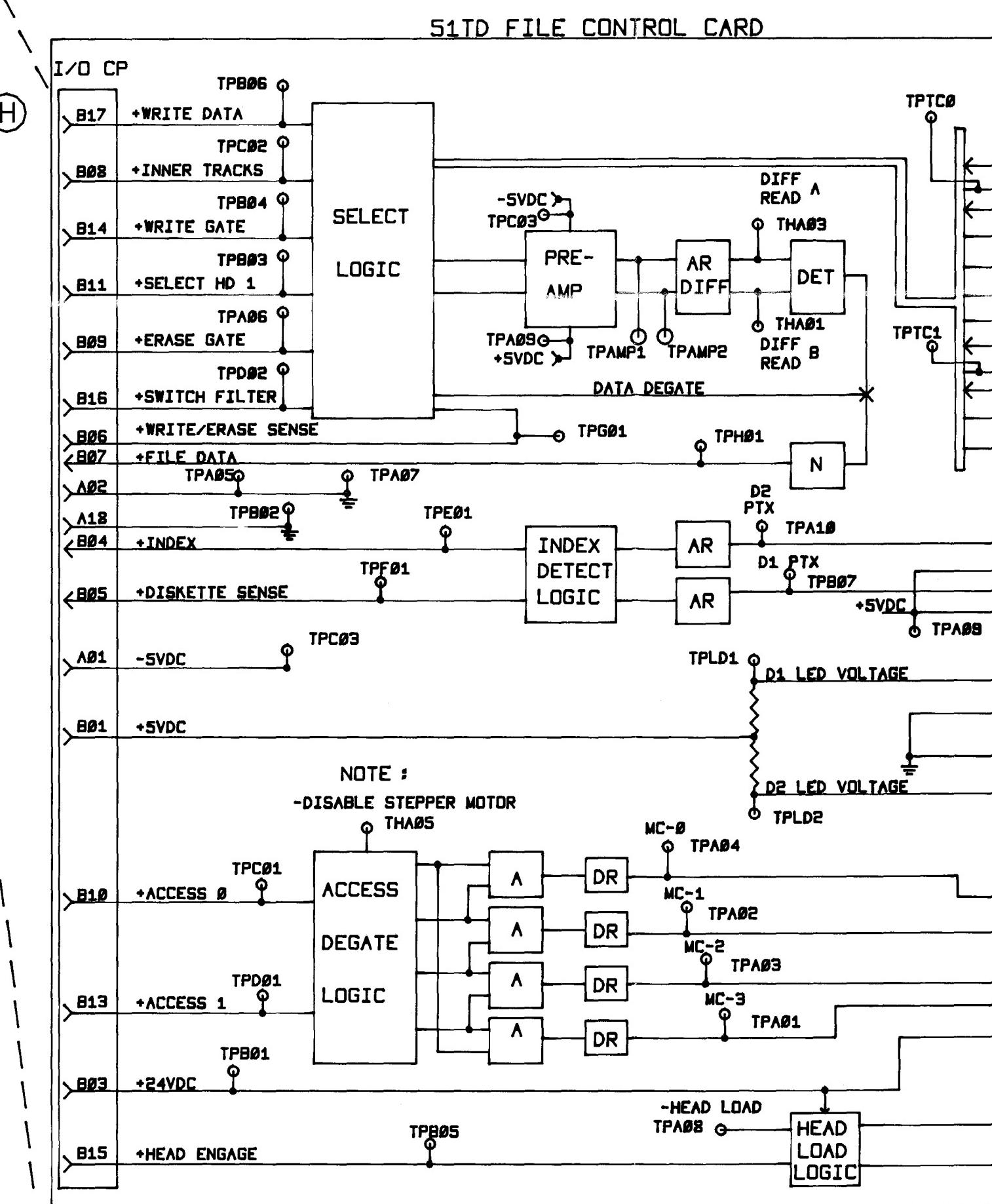
	A	B	C	D	E	F	G	H	I
LINE NAME	DISKETTE/MAIN MPU CARD				-A- BOARD CONNECTORS			FILE CONTROL CARD	
I/O PIN	LOCAL DRIVE 4000	DRIVE 4400	LOCAL/REMOTE DRIVE 4C00	DRIVE 4C00 I/O PIN	CONNECTOR J48	DRIVE 4C00 I/O PIN	CONNECTOR J4C	I/OCP 31SD	31TD
+ACCESS 0	05	07	04	07	1D06	1D07	18	B10	TPE01 TPC01
+ACCESS 1	06	17	08	17	1B07	1D05	06	B13	TPC01 TPD01
+DISKETTE 2 SENSE	18	12	28	12	2D06	2B03	17	B05	TPF01
+ERASE GATE	20	06	22	06	1B03	1B02	02	B09	TPG02 TPA06
+FILE DATA	17	04	27	04	2B06	2D07	19	B07	TPG01 TPH01
-FILE IN USE	30	11	31	11	1B08	2D05	14	14	X
GROUND	38	09	38	09	1D08	2D08	16	16	A12 TPF01 TPA07
GROUND	38	10	38	10					A18 TPC04 TPB02
+HEAD ENGAGE	15	15	07	15	1D09	1B09	15	B15	TPE02 TPD05
+INDEX	03	01	19	01	1D04	1D02	03	B04	TPE03 TPE01
+INNER TRACKS	12	05	11	05	1D13	2D04	01	B08	TPD01 TPC02
+SELECT HEAD 1	01	08	02	08	1B12	1B02	21	B11	TPB03
+SWITCH FILTER	13	14	14	14	1B13	2B05	20	B16	TPD02
+WRITE DATA	09	13	10	13	1D12	1D02	22	B17	TPC03 TPG06
+WRITE/ERASE SENSE	16	03	26	03	2B08	2B07	05	B06	TPF02 TPG01
+WRITE GATE	21	16	25	16	1B05	1B04	04	B14	TPH05 TPC04
-INNER TRACKS	1B11								
-SELECT HEAD 1	1B10								
-SWITCH FILTER	1D11								
+WRITE TRIGGER	1D10								
+SVDC					B01	TPA01 TPA09			X
-SVDC					A01	TPB01 TPC03			
+24VDC					B03	TP24V TPH01			

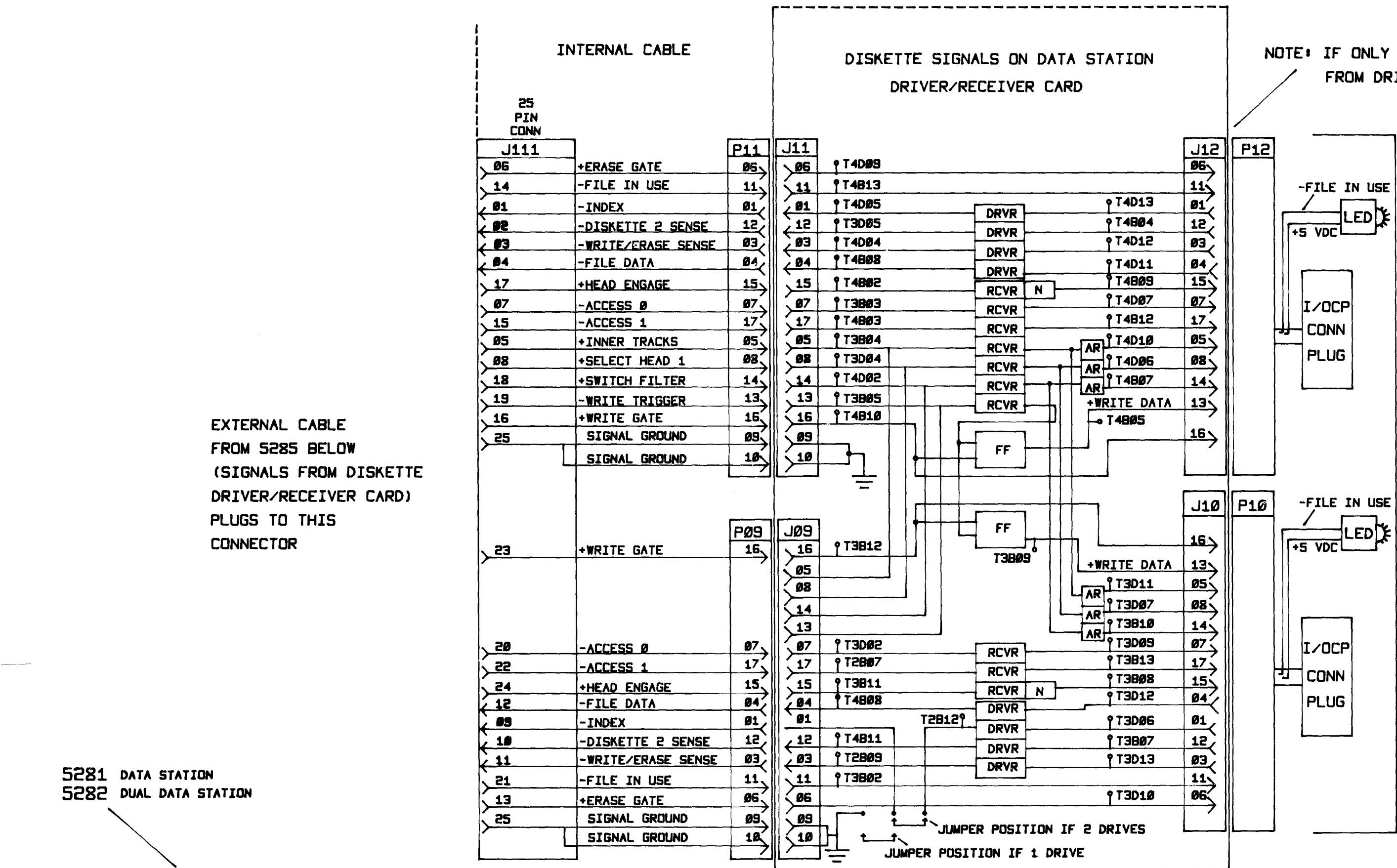
NOTE :

A JUMPER FROM GROUND TO THA05 (TP) OVERIDES ANY INPUT ACCESS LINES. THIS IS USED IN MAKING HEAD/STEPPER MOTOR ADJUSTMENTS.



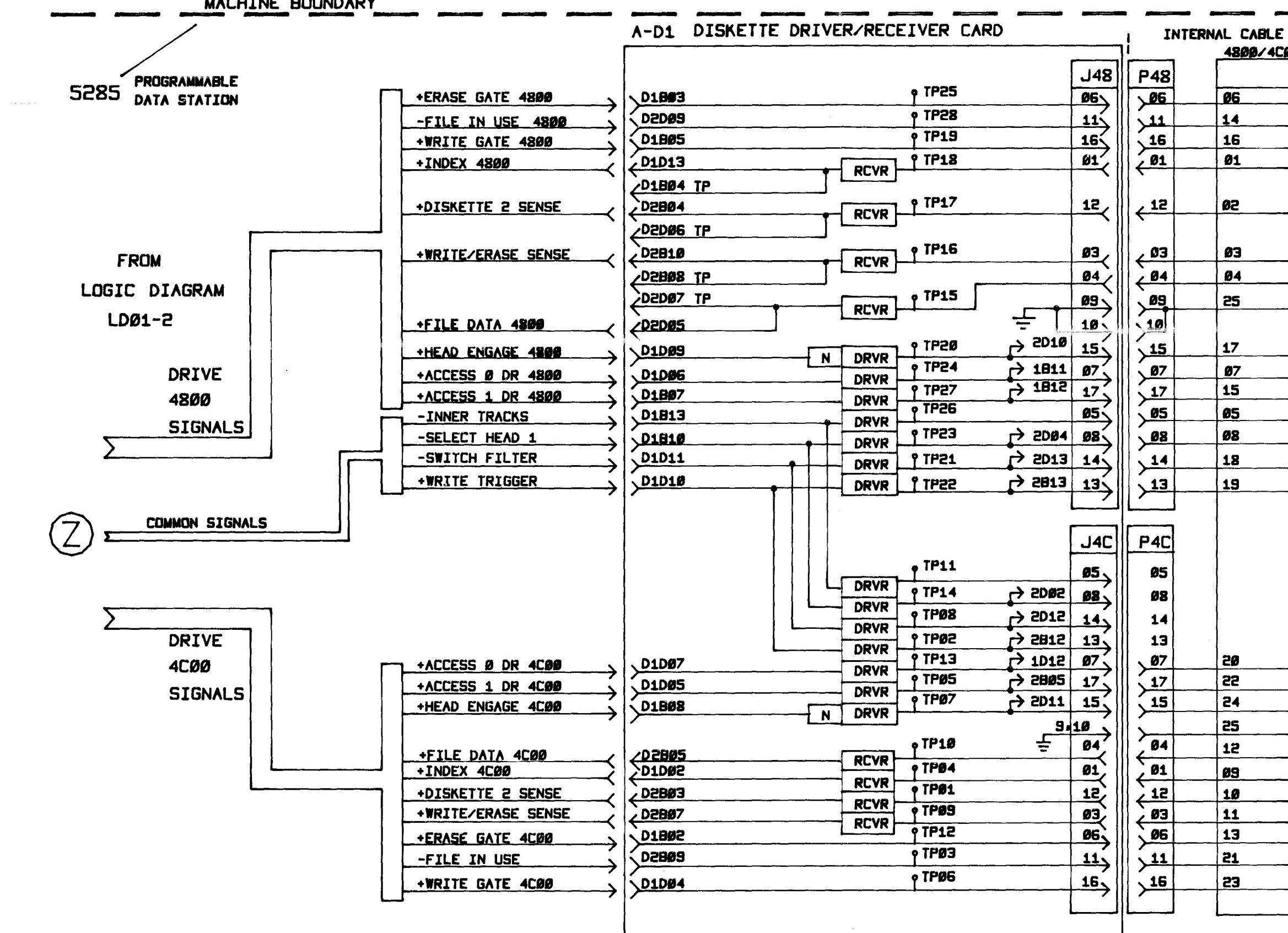
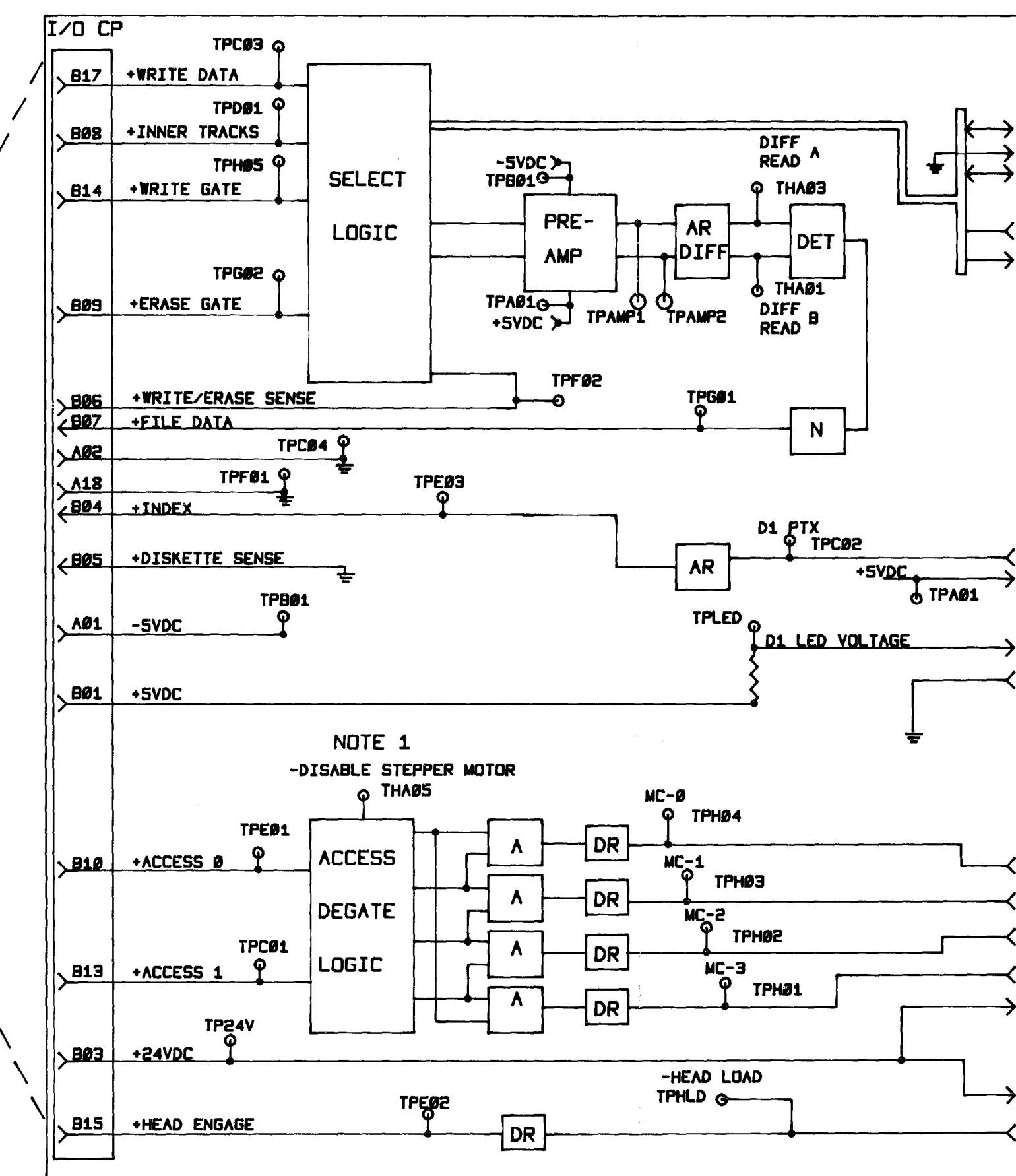
5285  
LD01-2  
LOCAL DISKETTE



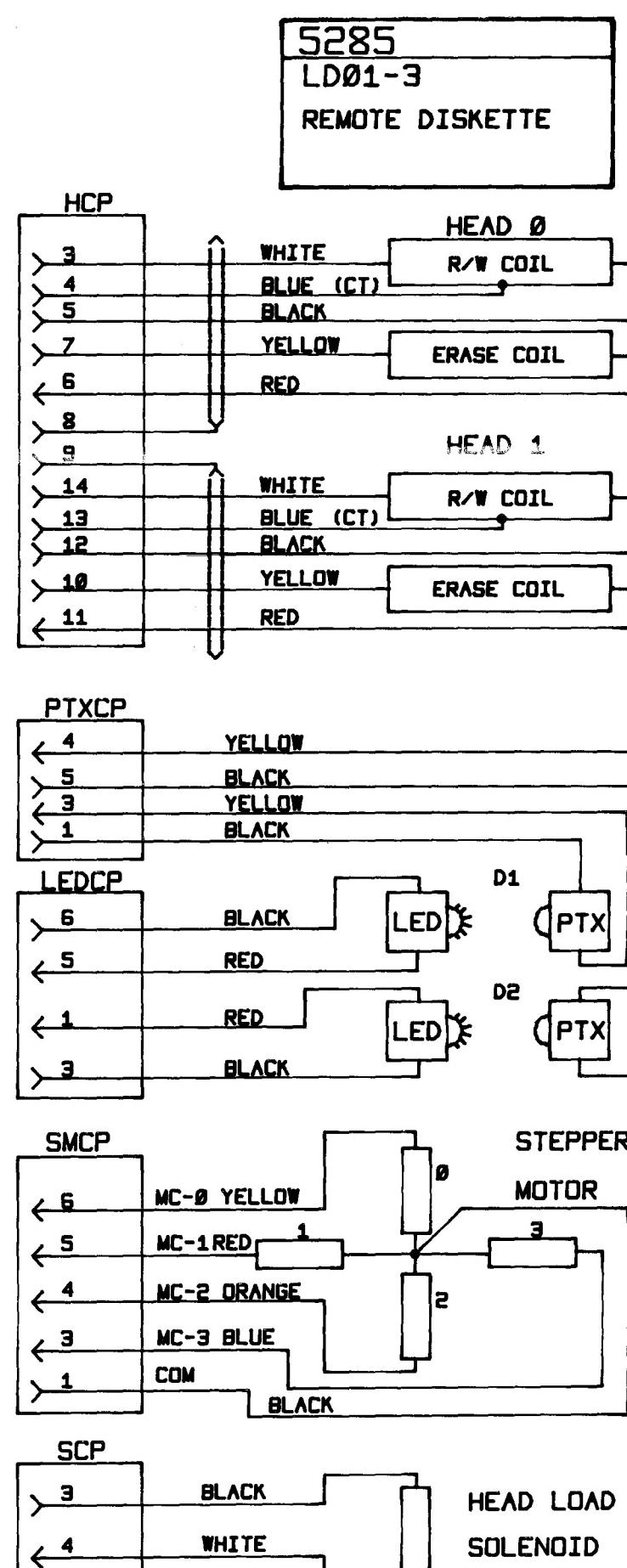
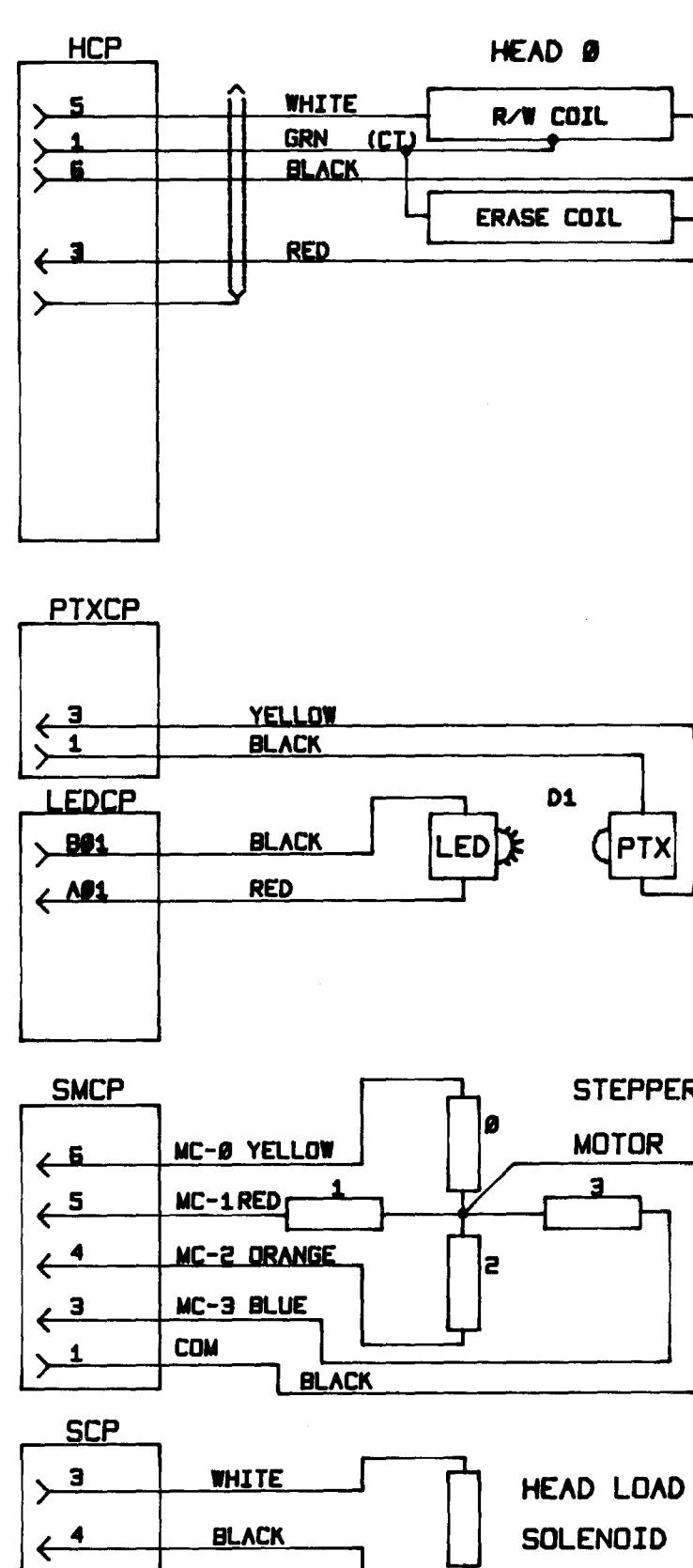
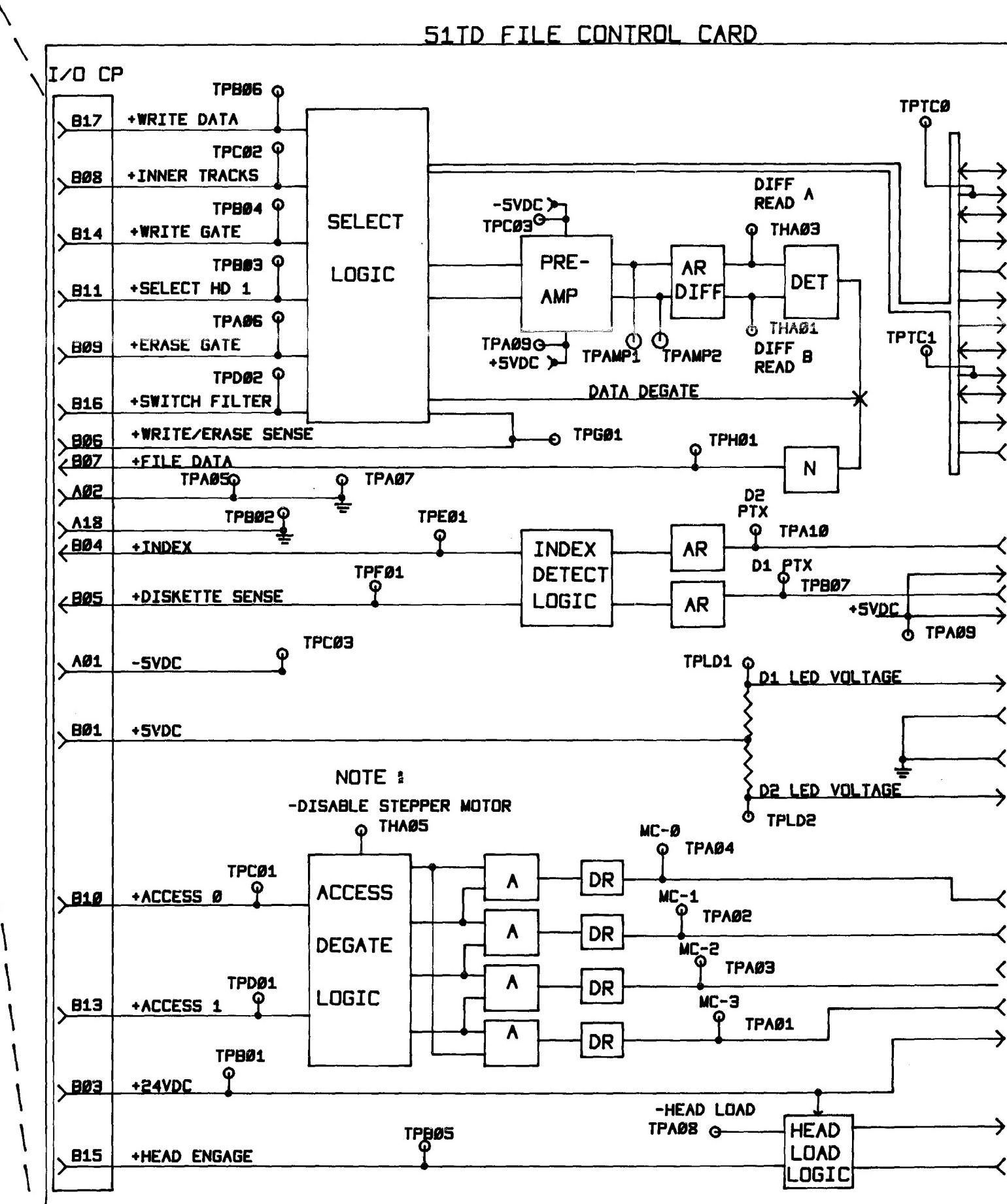


TO FILE CONTROL CARD CONNECTOR (I/OCP)

51TD



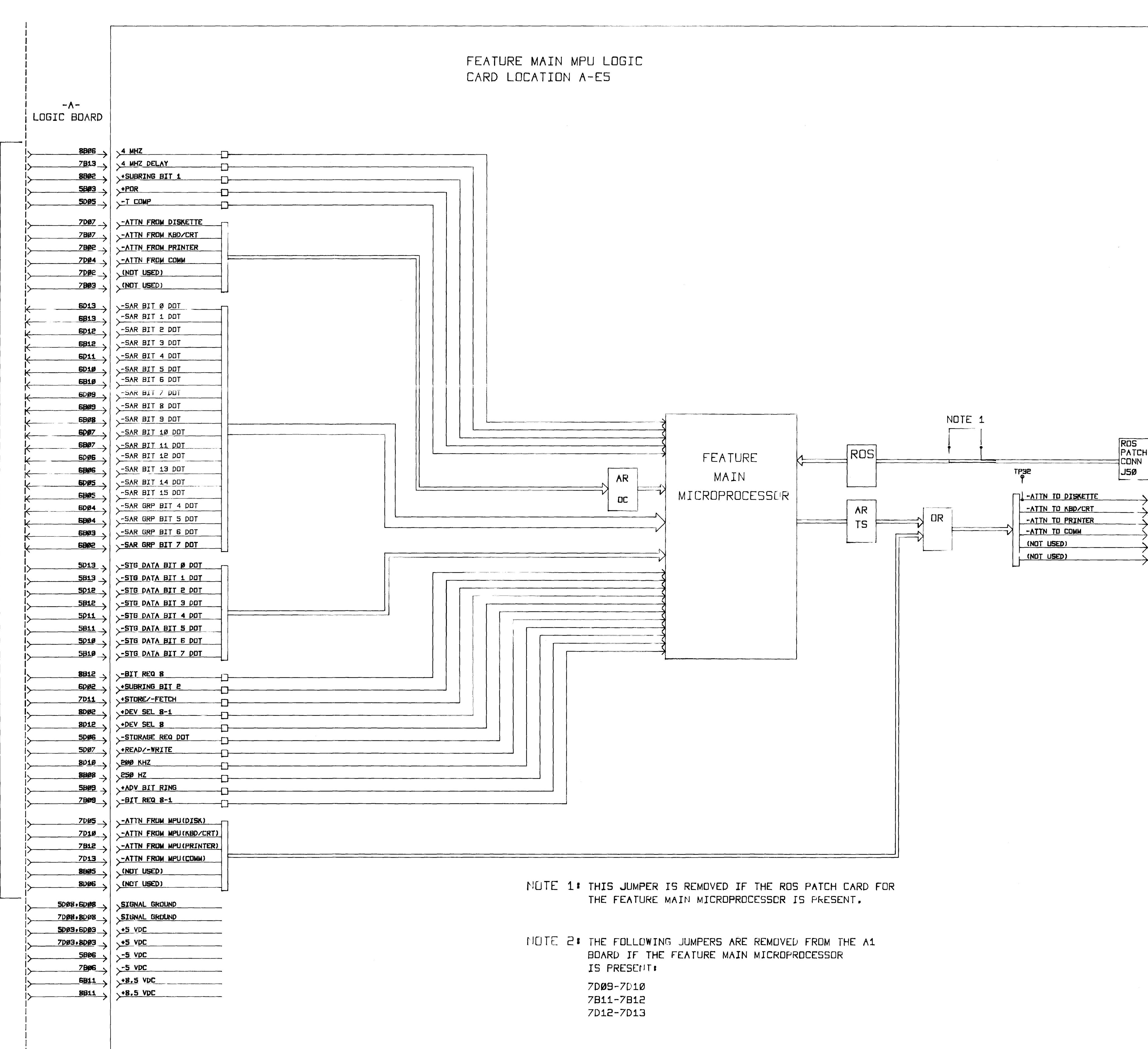
**NOTE : A JUMPER FROM GROUND TO THA05 (TP) OVERRIDES ANY INPUT ACCESS LINES. THIS IS USED IN MAKING HEAD/STEPPER MOTOR ADJUSTMENTS.**



FEATURE MAIN MPU LOGIC  
CARD LOCATION A-E5

-A-  
LOGIC BOARD

REFER TO  
MIM 531  
NET LISTING  
FOR  
THESE  
SIGNALS

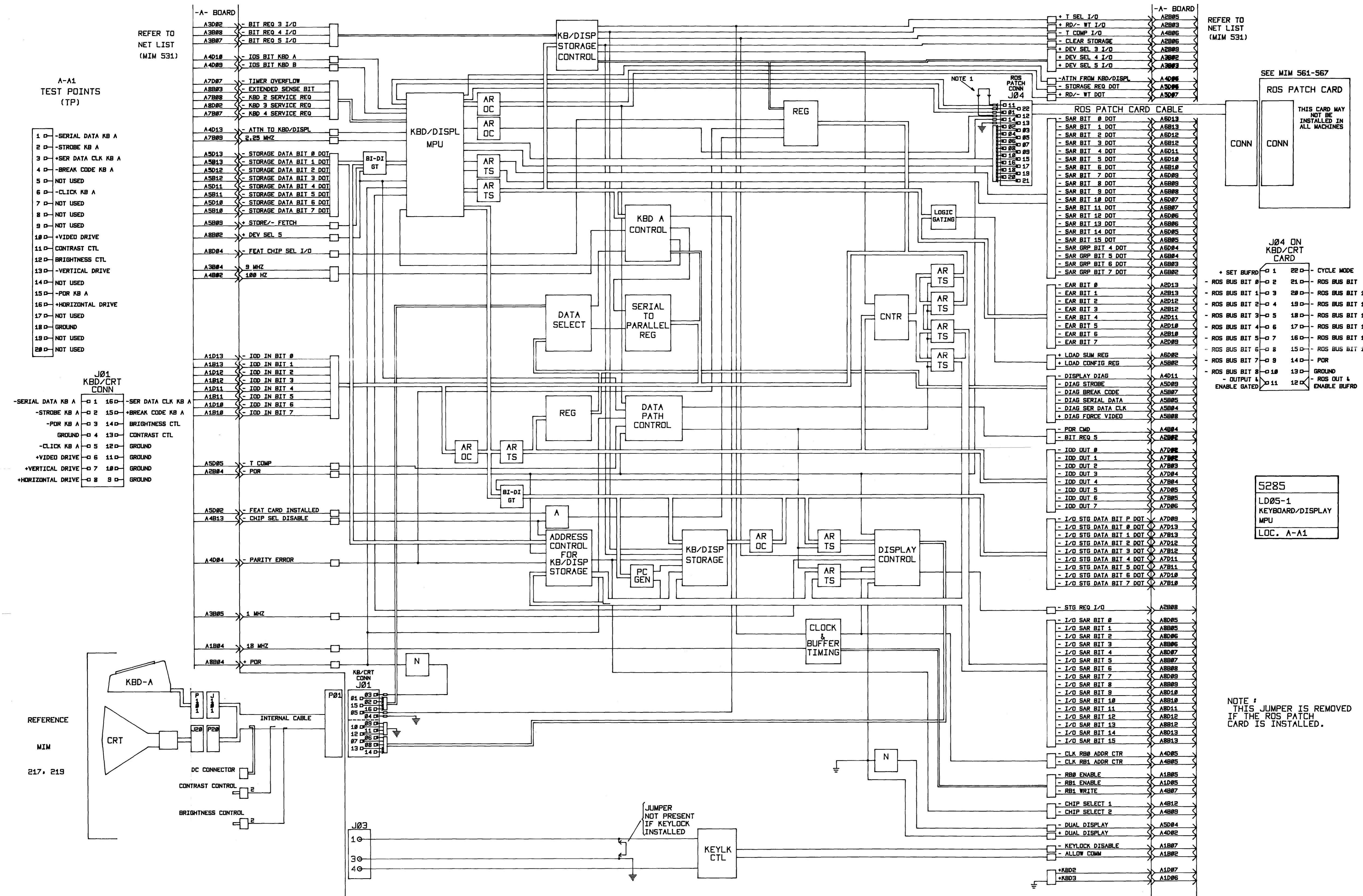


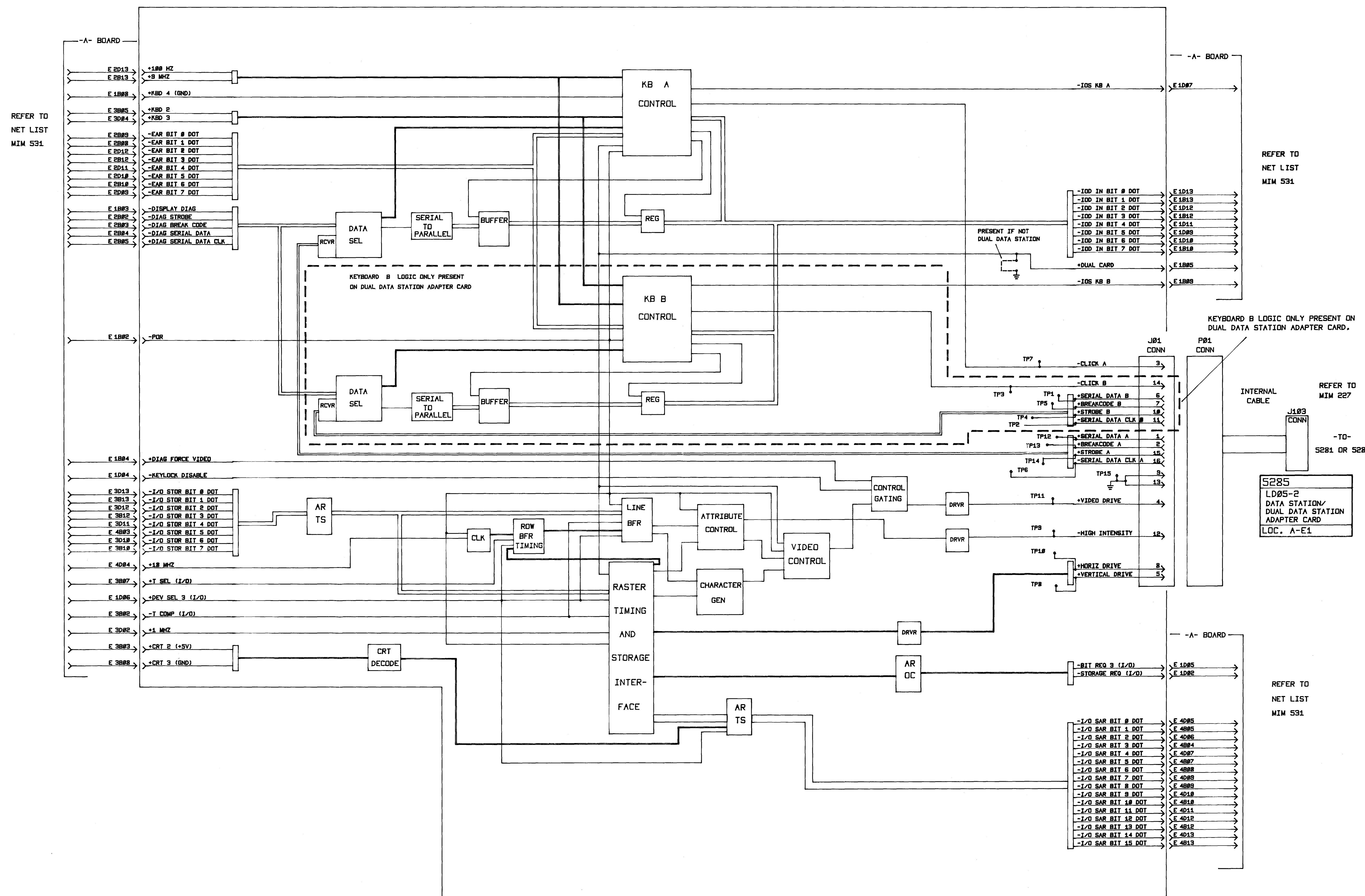
ROS PATCH CONNECTOR	
+SET BUFRD	o 1 220 -CYCLE MODE
-ROS BUS BIT 0	o 2 210 -ROS BUS BIT 9
-ROS BUS BIT 1	o 3 200 -ROS BUS BIT 10
-ROS BUS BIT 2	o 4 190 -ROS BUS BIT 11
-ROS BUS BIT 3	o 5 180 -ROS BUS BIT 12
-ROS BUS BIT 4	o 6 170 -ROS BUS BIT 13
-ROS BUS BIT 5	o 7 160 -ROS BUS BIT 14
-ROS BUS BIT 6	o 8 150 -ROS BUS BIT 15
-ROS BUS BIT 7	o 9 140 -POR
-ROS BUS BIT 8	o 10 130 GROUND
-ROS OUT & ENABLE BUFRD	o 11 120 -ROS OUT & ENABLE BUFRD

NOT INSTALLED  
IN ALL MACHINES

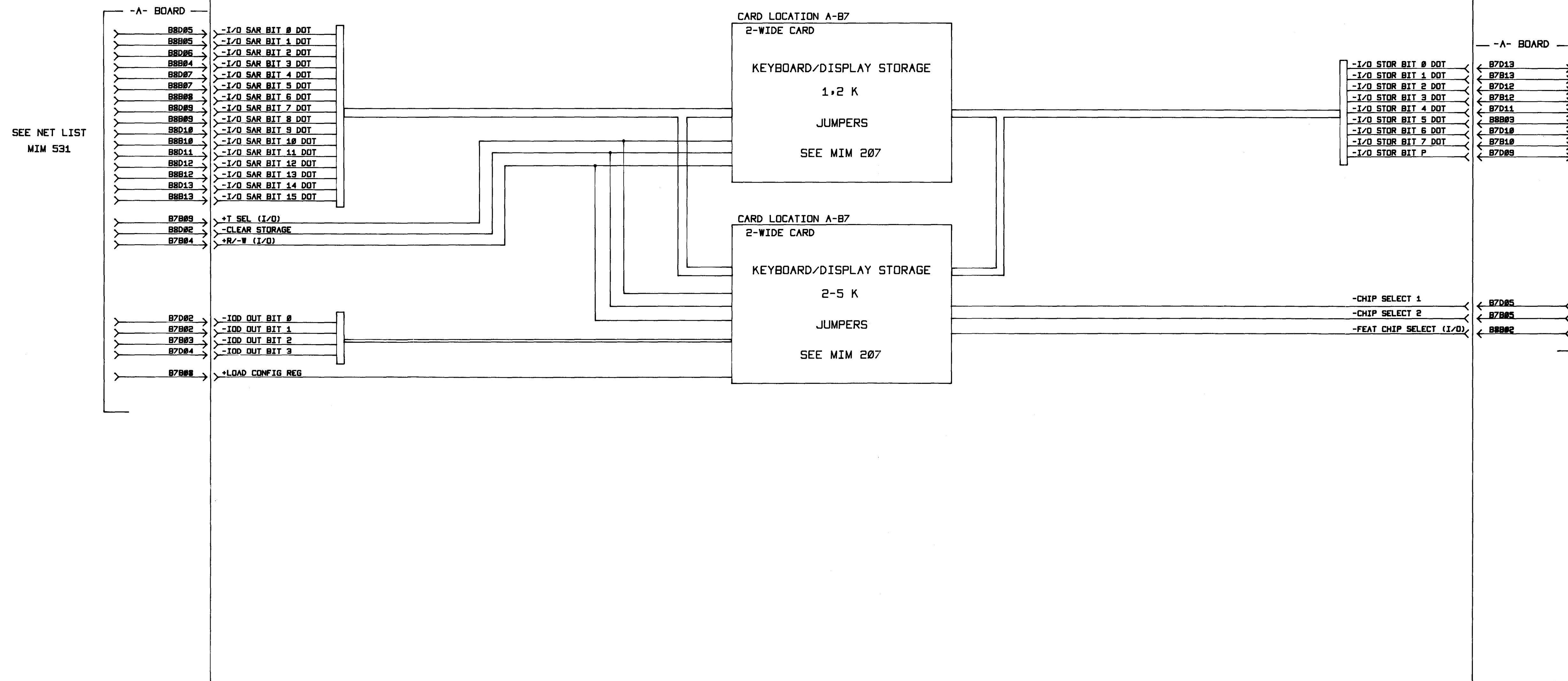
REFER TO  
NET LIST  
(MIM 531)  
FOR THESE  
SIGNALS

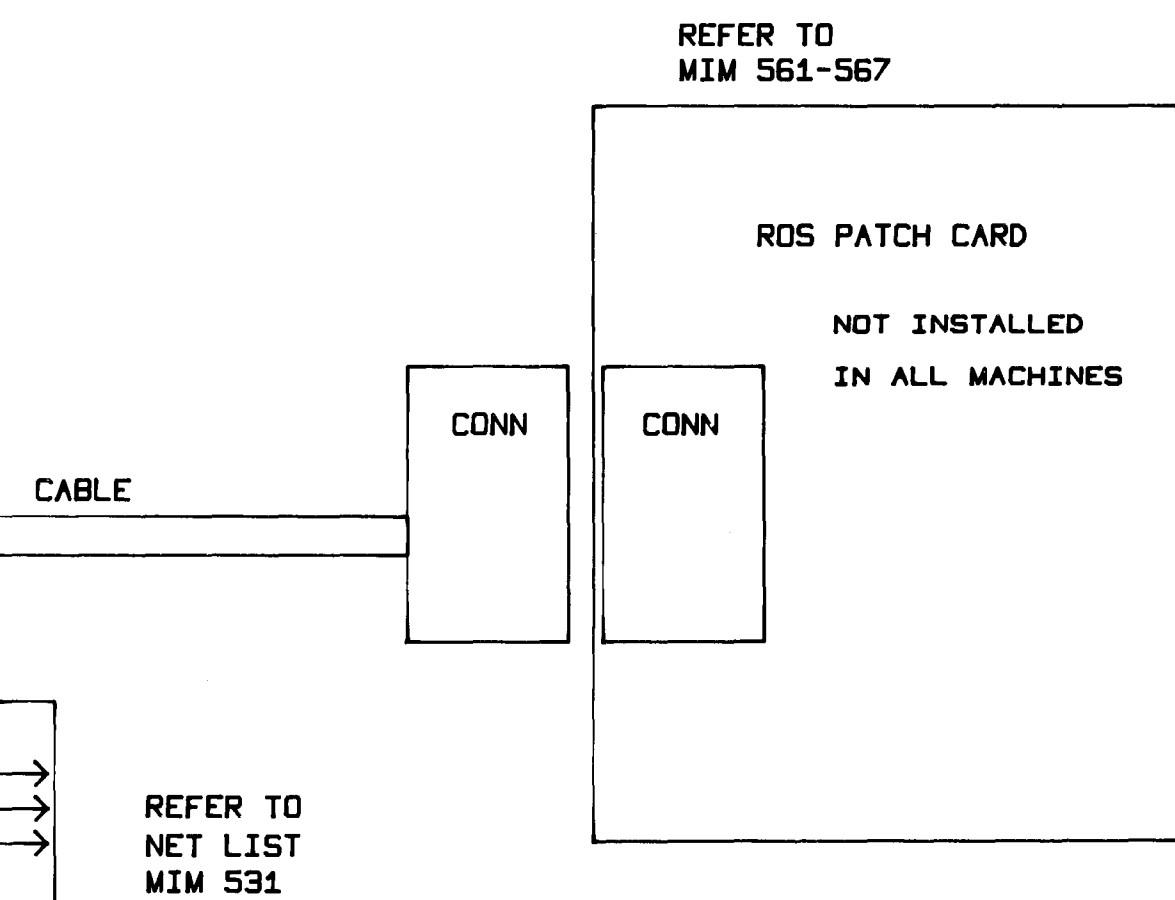
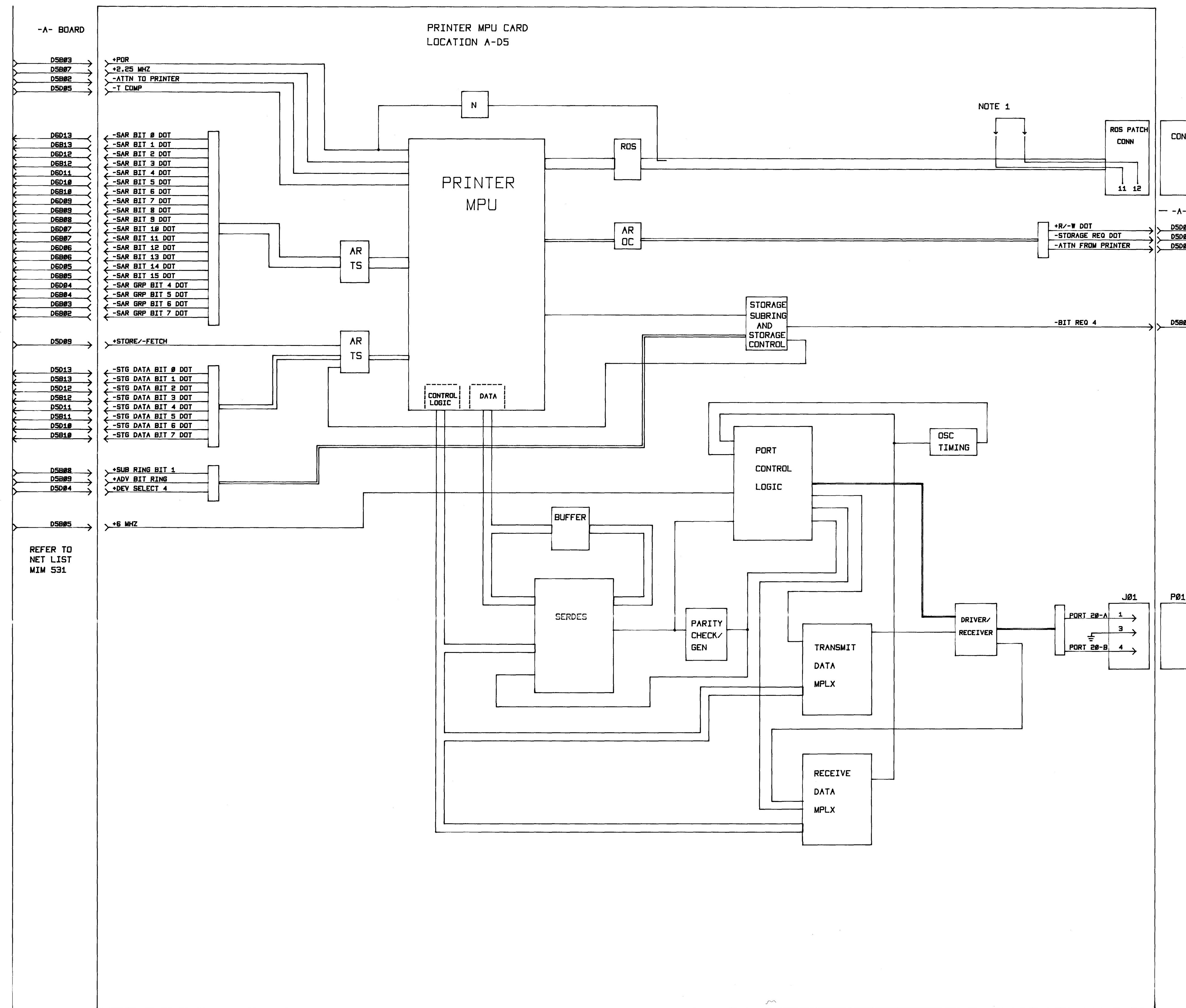
5285  
LD01-4  
FEATURE MAIN MPU  
LOC. A-E5





KEYBOARD/DISPLAY STORAGE - 5285





ROS PATCH CONNECTOR	
+SET BUFRD	-CYCLE MODE
-ROS BUS BIT 8	-ROS BUS BIT 9
-ROS BUS BIT 1	-ROS BUS BIT 10
-ROS BUS BIT 2	-ROS BUS BIT 11
-ROS BUS BIT 3	-ROS BUS BIT 12
-ROS BUS BIT 4	-ROS BUS BIT 13
-ROS BUS BIT 5	-ROS BUS BIT 14
-ROS BUS BIT 6	-ROS BUS BIT 15
-ROS BUS BIT 7	-POR
-ROS BUS BIT 8	-ROS OUT & ENABLE BUFRD
-ROS BUS BIT 9	GROUND
-ROS BUS BIT 10	
-ROS BUS BIT 11	
-ROS BUS BIT 12	
-ROS BUS BIT 13	
-ROS BUS BIT 14	
-ROS BUS BIT 15	
-POR	
-ROS OUT & ENABLE BUFRD	
-ROS BUS BIT 11	
-ROS BUS BIT 12	
-ROS BUS BIT 13	
-ROS BUS BIT 14	
-ROS BUS BIT 15	
-POR	
-ROS OUT & ENABLE BUFRD	

**NOTE 1:** THIS JUMPER IS REMOVED IF THE ROS PATCH CARD IS PRESENT.

5285
LD07
PRINTER MPU CARD
A-D5

**REFER TO MIM 741,743**

